

C3.2.9 Type, Size, and Location (TS&L) plans ~~Preliminary situation plans~~

PRELIMINARY BRIDGE DESIGN

TS&L SITUATION PLAN SHEET(S) LAYOUT GUIDELINES

Refer to the PLAN REVIEW CHECKLIST or PRELIMINARY DESIGN GUIDELINES available on the Bridge Web Site which include required information for the TS&L Preliminary Situation Plan sheet(s). The following guidelines are intended to provide consistency for placing information when additional plan sheet(s) are needed.

The first sheet shall show a typical bridge layout per guidelines and be labeled SITUATION PLAN below the plan view and in the title block.

Bridge sites typically have areas of interest such as stream meanders, interchanges, etc. which do not fit on a single Situation Plan sheet. To show these areas, a SITE PLAN sheet shall be created. This second plan sheet shall be labeled as SITE PLAN below the plan layout and the title block shall be labeled as SITUATION PLAN - SITE. The scale of the site plan layout may be changed (labeled with a Scale Legend) to adequately show conditions outside of the proposed structure area. Typically, the SITE PLAN shall be shown on one sheet. The SITE PLAN sheet may also be used to place information when insufficient room remains on the SITUATION PLAN sheet.

Any additional sheet(s) showing details or other preliminary information shall be labeled as MISCELLANEOUS DETAILS and the title block(s) should be labeled as SITUATION PLAN - MISC.

In general, additional plan sheets shall be created except for relatively small bridges where limited additional information is needed.

All items required by the PLAN REVIEW CHECKLIST or PRELIMINARY DESIGN GUIDELINES which are not listed in the mandatory or preferred item guidelines shall be placed at the designer's discretion. The designer shall follow the guidelines of the mandatory and preferred items listed for both situation plan layout and site plan layout sheets when placing information.

Topography is defined as information typically obtained from the project survey such as ground features and utilities, excluding ground shots and contours.

The mandatory items listed below shall be shown on the situation plan layout sheet(s).

Mandatory Items for the Situation Plan layout sheet(s)

1. Situation Plan
 - SITUATION PLAN heading under plan view layout
 - Dimensions of Proposed Structure(s)
 - North Arrow
 - Centerline Roadway Alignments and labels
 - Centerline Stationing labels
 - Profile Grade Line labels
 - Existing Structure(s) (A)
 - Proposed Grading Slope Lines (not proposed contours) (A)
 - Revetment (A)
 - Slope Protection Note (A)

- Guardrail Indicated
 - Topography (A)
 - Minimum Vertical Clearance Location (overhead bridges)
 - Scale Legend
 - Horizontal Clearance to Piers (overhead bridges)
2. Longitudinal Section
 3. Typical Approach Section
 4. Location Data
 5. Bench Mark

(A) These items to be edited as required prioritizing clarity of other mandatory items or text. More comprehensive treatment of these items can be made on the site plan sheet in cases where extensive editing is required on the situation plan layout sheet(s).

The preferred items listed are expected to be shown on the situation plan layout sheet(s) but due to space restrictions may be shown on the site plan layout sheet.

Preferred Items for the Situation Plan layout sheet(s) (In order of preference)

1. Proposed Grade
2. Hydraulic Data
3. Traffic Estimate
4. Utilities Legend
5. Spiral Curve Data
6. Horizontal Curve Data
7. Minimum Vertical Clearance note
8. Staging Widths

The mandatory items listed below shall be shown on the site plan layout sheet. Some duplication is necessary for references between the multiple SITUATION PLAN sheets.

Mandatory Items for the Site Plan layout sheet

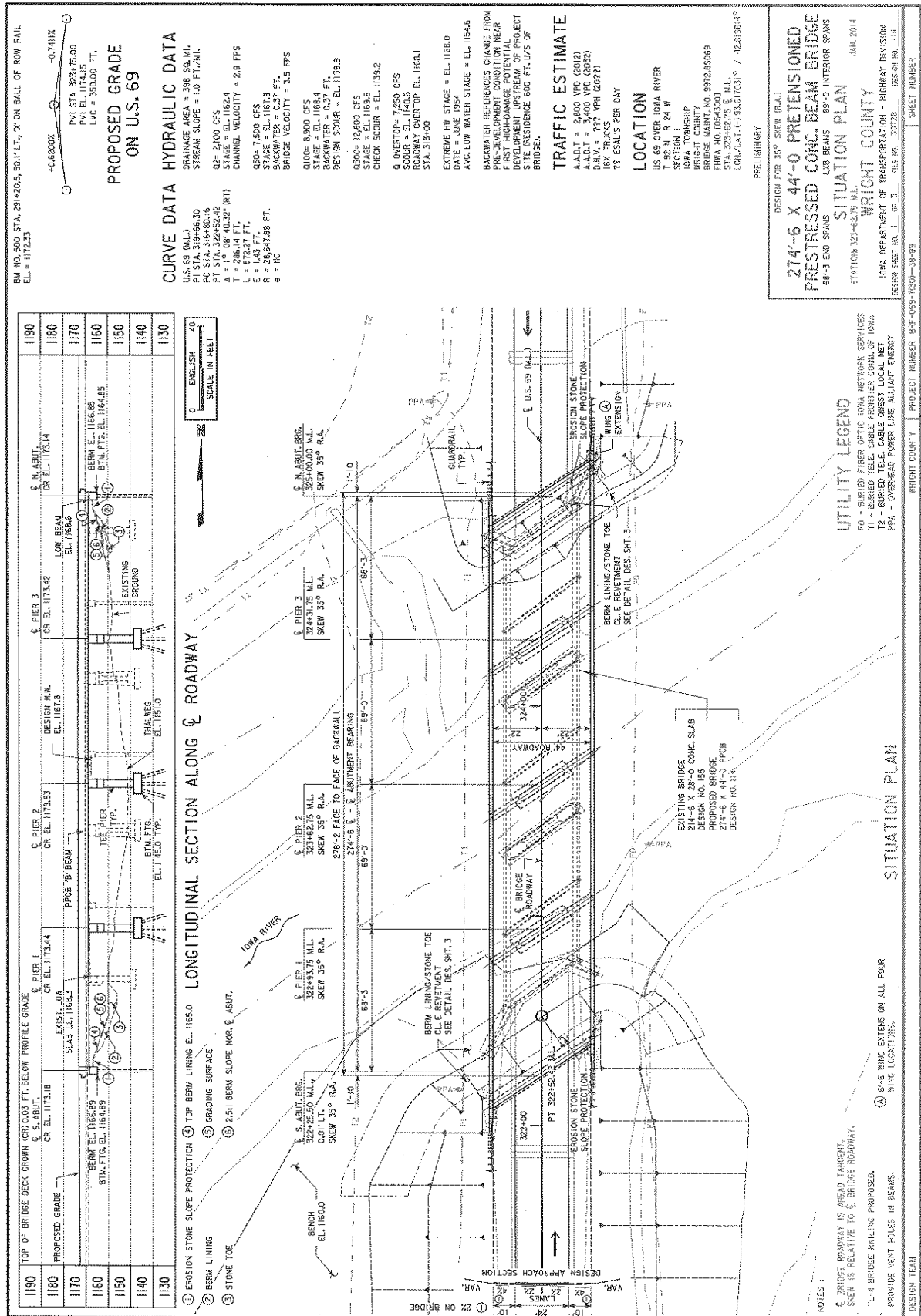
1. Site Plan
 - SITE PLAN heading under plan view layout
 - North Arrow
 - Centerline Roadway Alignments and labels
 - Centerline Stationing labels
 - Proposed Structure(s) (B)
 - Existing Structure(s) (B)
 - Proposed Grading Slope Lines (not proposed contours) (B)
 - Revetment (B)
 - Guardrail Indicated
 - Topography (B)
 - Scale Legend
 - Beginning & End Bridge Stations at Centerline Abutment Bearings

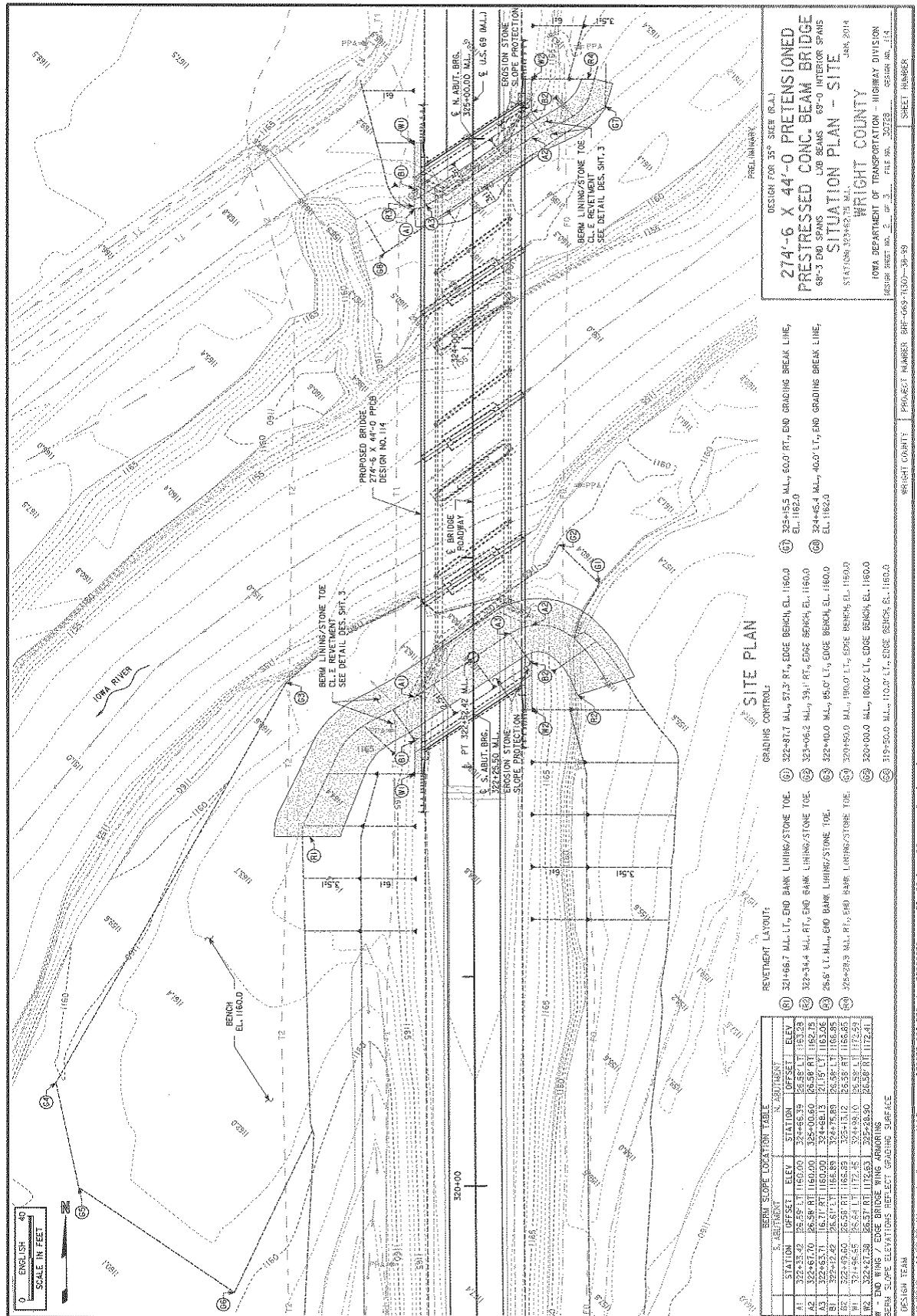
(B) These items should not be edited extensively on the site plan layout sheet and a more comprehensive treatment of these items should be shown on this sheet where extensive editing may have been necessary on the situation plan layout sheet(s).

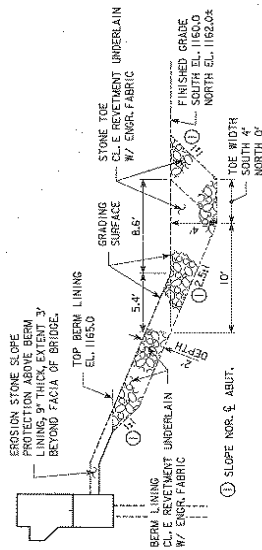
The preferred items listed are expected to be shown on the site plan layout sheet but due to space restrictions may be shown on the situation plan layout sheet(s).

Preferred Items for the Site Plan layout sheet

1. Berm Slope Location Table & Associated Point I.D. Labels (Show together on the sheet)
2. Revetment Limits & Typical Section Details
3. Survey Ground Shots or Contours of existing ground supplemented with Ground Shots (not proposed contours)







SECTION THROUGH STONE TOE AND BERM LINING

REVETMENT QUANTITIES					
REVETMENT TYPE - LOCATION	REVETMENT CL.E (TON)	EROSION STONE (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)	
BERM LINING-STONE TOE - SOUTH	837	-	781	523	
BERM LINING-STONE TOE - NORTH	234	-	269	146	
SLOPE PROTECTION - SOUTH	-	24.5	61	15.3	
SLOPE PROTECTION - NORTH	-	24.2	80	15.1	
TOTALS	1,071	48.7	1,171	699	

REVETMENT EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE.
REVETMENT AND EROSION STONE ESTIMATED AT 145 TON/CY

PRELIMINARY

DESIGN FOR 35° SKEW (R.L.)

274'-6" X 44'-0" PRETENSIONED
PRESTRESSED CONC. BEAM BRIDGE

68'-3" END SPANS L'8 BEAMS 69'-0" INTERIOR SPANS

SITUATION PLAN - MISC.

STATION 523+82.75 M.L.

JAN. 2014

WRIGHT COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 35-39

FILE NO. 30709 - 35-39

PROJECT NUMBER BPF-665-T009-35-39

WRIGHT COUNTY

SHEET NUMBER

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